I. AMENDMENTS

Please make the following amendments:

In The Specification:

Please replace the paragraph beginning from line 29 at page 41 with the following:

--Plasmid DNA was isolated and inserts from each clone were amplified by use of the polymerase chain reaction (PCA) and purified. Inserts were amplified by PCR in a 96-well format using primers (PN132, 5'CCTCTATACTTTAACGTCAAGG (SEQ ID NO.1); PAN133, 5'TTGTGTGGAATTGTGAGCGG (SEQ ID NO.2)) complementary to the 1YES polylinker and containing a six carbon amino modification (Glen Research) on the 5' end. PCR products were purified in a 96-well format using QIAquick columns (Qiagen).--

C1

In the Claims:

Please amend claims 7, 21, and 34 as follows.

C2 Sub 22

7. (Amended) A substrate with a surface comprising a microarray of DNA sequences, wherein (i) the microarray has a density of about 400 or more discrete regions of DNA sequences per cm^2 of substrate surface, (ii) the DNA sequences are isolated polynucleotides, (iii) the microarray comprises 400 or more regions, and (iv) the DNA sequences contained in each discrete region are at least about 50 subunits in length, each region in the microarray is essentially free of cross-contamination with DNA sequences individually applied to the other regions in the microarray.

C3

21. (Amended) A substrate with a surface comprising a microarray of DNA sequences, wherein the DNA sequences are polynucleotides, produced by a method comprising the steps of